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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,753	07/09/2003	Marcel J.G. Janssen	99B024-5	9891

23455 7590 05/03/2007  
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EXAMINER
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BULLOCK, IN SUK C

ART UNIT	PAPER NUMBER
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1764

MAIL DATE	DELIVERY MODE
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05/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/615,753

Applicant(s)

JANSSEN ET AL.

Examiner

In Suk Bullock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 51-58, 60-68 and 70-135 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 51-58, 60-68 and 70-135 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/30/07</u> | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

In response to the amendment, objection to the specification is withdrawn.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 51-58, 60-68, and 70-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,973,792 to Lewis et al. (hereinafter "Lewis").

The Lewis reference discloses a chemical conversion process employing a catalyst comprising non-zeolitic molecular sieves such as SAPO-17 and SAPO-34. The process comprises: (a) contacting a feedstock with a fluidized mass of solid catalyst particles in a reaction zone at conditions effective to convert the feedstock into a product; and (b) contacting the particles in the reaction zone with regeneration medium at conditions effective to maintain or improve the effectiveness of the catalyst to promote the desired chemical conversion. For example, the catalyst may become less effective due to formation of carbonaceous deposits or precursors in the pores or other part of the catalyst during step (a) of the process. In step (b), the catalyst in the reaction zone is regenerated by removing carbonaceous deposit material by oxidation in an oxygen-containing atmosphere. See Abstract; col. 2, lines 20-42; and col. 18, line 67 to col. 19, line 37; and col. 21, lines 13-33. The contacting temperature is in excess of 200° C (col. 23, lines 11-26). It is particularly noted that Example 28 discloses loading a catalyst comprising SAPO-34 into a reaction vessel and heating it to a temperature of 500° C (col. 26, lines 65-68).

Lewis fails to disclose the methanol uptake index of at least 0.15 for the SAPO catalyst.

Since the reference discloses the same SAPO catalyst as that claimed in the present invention, the SAPO catalyst of Lewis reference would inherently have the same claimed property, i.e., methanol uptake index.

It is noted that the present claimed invention is directed to loading an activated SAPO catalyst into a heated system and maintaining catalytic activity of an activated SAPO catalyst. It would have been obvious to one having ordinary skill in the art that the SAPO catalyst of Lewis is activated prior to loading it into the reactor because of the disclosure that the catalyst particles were calcined (see particularly col. 23, lines 55-56). It is deemed that the activated catalyst of Lewis is maintained at the claimed temperature of 150° C by the teaching by Lewis that the catalyst is loaded and heated to a temperature of 500° C in Example 28.

With respect to the claimed limitations directed to providing a SAPO catalyst with a shield, the teaching by Lewis that the catalyst particles have carbon deposits in the pores of the catalyst is equated to be the same as the shield. Also, the regeneration step disclosed by Lewis reads upon the claimed step of removing the shield and maintaining the catalyst at a temperature of at least 150° C.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

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F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 51-135 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-69 of copending Application No. 10/641,718. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is directed to loading an activated catalyst into a heated system.

The present application differs from the copending application 10/641,718 in that the present application does not include contacting the heated catalyst with a feed. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the heated catalyst in chemical reactions.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed January 30, 2007 have been fully considered but they are not persuasive.

Applicant argues, and the examiner agrees, that Lewis is silent with regard to the problem of "catalyst deactivation caused by contact with moisture and . . . to prevent catalyst deactivation during storage, transport, or loading of the catalyst particles . . . ." However, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, Lewis discloses placing the activated SAPO-34 catalyst in the reaction vessel and heating it to a temperature of 500° C and adding a steam to the heated vessel (see Example 28). This disclosure by Lewis reads upon the claimed method of loading/exposing the catalyst to moisture and maintaining a temperature of 150° C or above before use of said catalyst in a catalytic process.

Applicant further argues "Example 28 clearly indicates that the catalyst is heated to 500° C after it has been placed in the reaction vessel." This argument is not found persuasive because applicant has not claimed that the catalyst is heated to any particular temperature prior to it being "maintained at a temperature of 150° C or above" and nor has applicant claimed that the temperature is held constant. Lewis' disclosure of heating to a temperature of 500° C is deemed to read upon the claimed step of having the catalyst "maintained at a temperature of 150° C or above" because during the heating of the catalyst to 500° C, the catalyst would be heated and "maintained" at a particular temperature as the temperature is increased to 500° C.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., any loading of the used catalyst) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Also, applicant argues that "there is no disclosure in Lewis involving any loading of the used, and presumably coked, catalyst into a regenerator or storage environment" as claimed in the present application "because most of the catalyst particles in Lewis never leave the Lewis reactor for an *ex situ* regenerator or storage environment." This argument, too, is not found persuasive because the claims recite "the heated system comprises a **reactor**, regenerator or storage environment." (**emphasis added**) Thus, where the catalyst is loaded is not limited to a regenerator or storage environment but includes a reactor.

Applicant argues "although Lewis expose catalyst particle within the reactor to steam at elevated temperatures during the Lewis purge procedure, this step in Lewis clearly occurs after the Lewis catalyst particle have already been used in a catalytic process and before the coke shield of the catalyst active sites has been removed by *in situ* regeneration." This is not found persuasive because steam is introduced into a reactor as a diluent and, therefore, the catalyst particles are exposed to steam after the removal of the shield; the shield, i.e., template, is removed when the catalyst particles were calcined (see particularly col. 23, lines 55-56). With regard to the removal of the



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coke shield, the claimed invention is not limited to coke shield but includes a template as a shield.

With regard to the argument directed to methanol uptake index characteristic, this is not persuasive because the SAPOs claimed by applicant are the same as those used in Lewis. Absent a showing to the contrary, it is maintained the SAPOs in Lewis would have the claimed methanol uptake index.

It is noted applicant has requested that the provisional double patenting rejection should be held in abeyance until the pending claims are allowable. The pending claims are not allowable at this point in the prosecution and, therefore, the provisional double patenting rejection is maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to In Suk Bullock whose telephone number is 571-272-5954. The examiner can normally be reached on Monday - Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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